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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			JARRETT, SCOTT L	
			ART UNIT	PAPER NUMBER
			3623	

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/799,892

Applicant(s)

KAUFFMAN ET AL.

Examiner

Scott L. Jarrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Title***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Service Activity Management System and Method for Semiconductor Manufacturing Equipment.

### ***Claim Objections***

2. Claim 37 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim merely states utilizing a computer readable medium to cause a computer to perform the method of managing service activities of Claim 30.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schlachach et al., U.S. Patent No. 6,810,406.

Regarding Claims 1 and 21, the method/system for managing service activities as claimed is merely configured to receive, store and provide service activity data however the system does not actually perform the claimed operations. For the purposes of examination examiner assumes the applicant will amend the claims to recite that method/system for managing service activities actually receives, stores and provides service activity data.

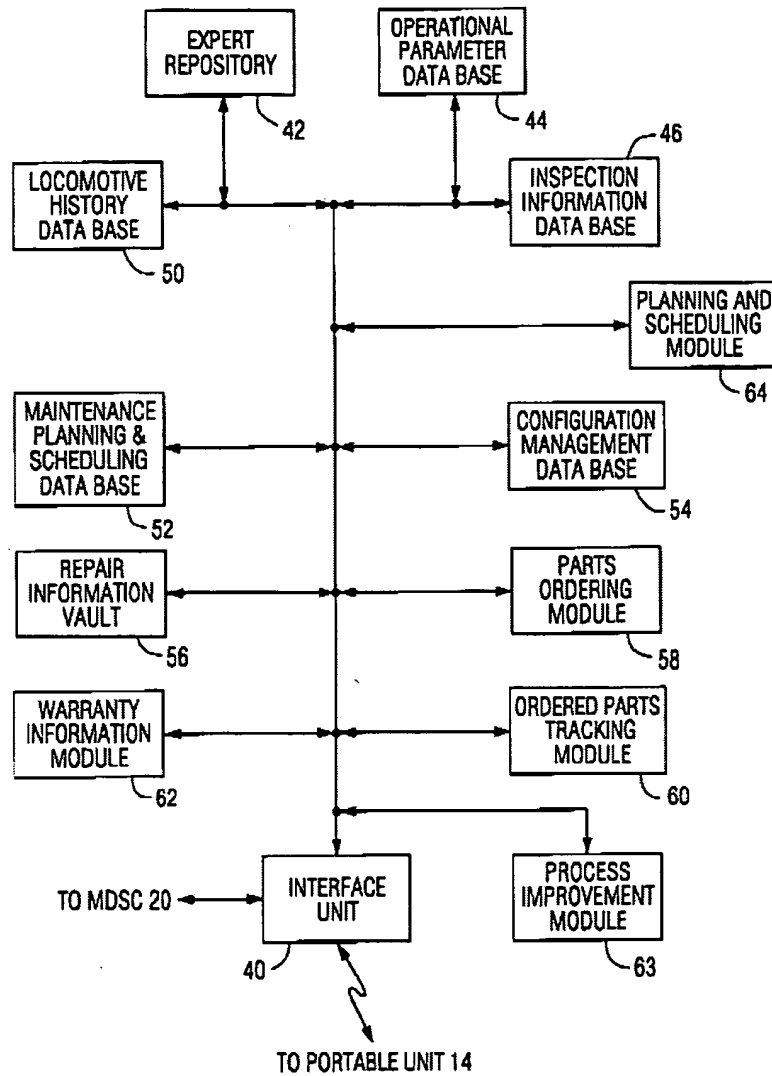
Further regarding Claims 1 and 21 Schlachach et al. a system and method for servicing (maintaining, supporting, etc.) complex industrial equipment wherein the system stores, in one or more database, and utilizes a plurality of service, equipment, service technician (personnel) and customer information (Abstract).

More specifically Schlachach et al. teach a system and method for managing service activities comprising:

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- receiving service activity data related to at least one of a service component (item, equipment, part, etc.; Column 2, Lines 59-68; Column 3, Lines 1-17; Figure 2) a service operator (technician, personnel, staff, etc.; Column 5, Lines 30-35; Figures 1, 5-6), or a service account (relationship, contract, agreement, warranty, etc.; Column 4, Lines 61-68; Column 11, Lines 12-17; Figure 2, Element 62), via a data collection system (module, code, subsystem, program, etc.);
- storing the service activity data, via a data storage system (Figure 2; Figure 10, Element 534);
- providing service action data utilizing the service activity data by performing at least two of the following (Figures 2 and 10): component repair (Column 5, Lines 30-57), start-up (initialization, set-up, installation), preventative maintenance (Column 6, Lines 35-60), cleaning, revisions, enhancements (upgrades, configuration management; Column 7, Lines 53-68; Column 9, Lines 36-68), de-installation (uninstall, decommission, etc.), education (training; Column 7, Lines 43-64) or collaboration (Column 5, Lines 45-63); and
- utilizing the service action data to perform a service action (Column 13, Lines 11-65; Figures 5-6).

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**FIG. 2**

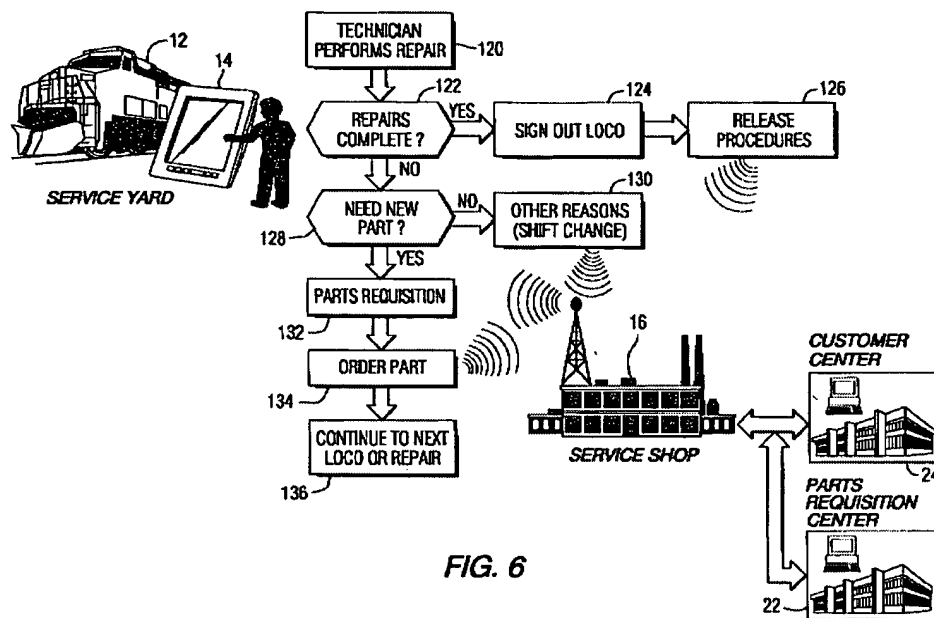


FIG. 6

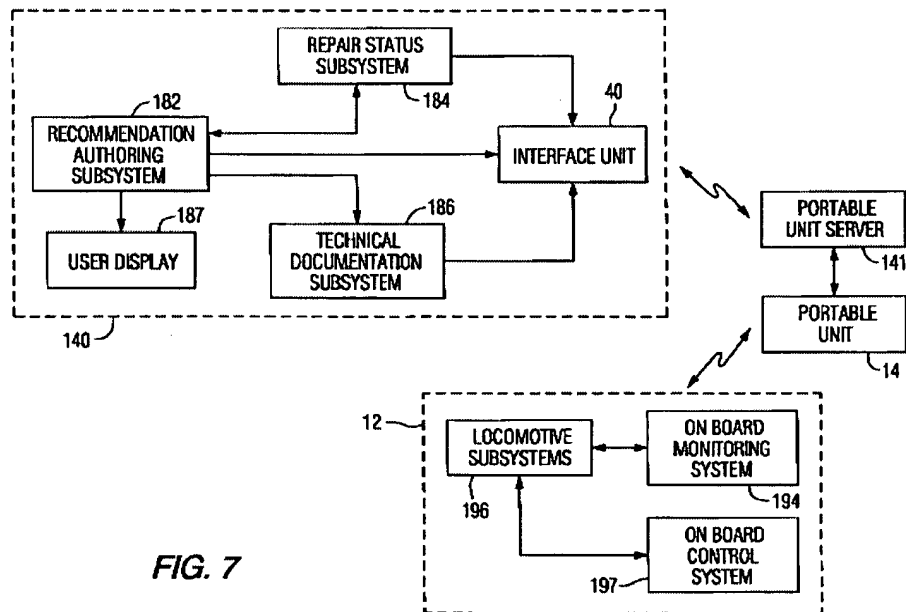


FIG. 7

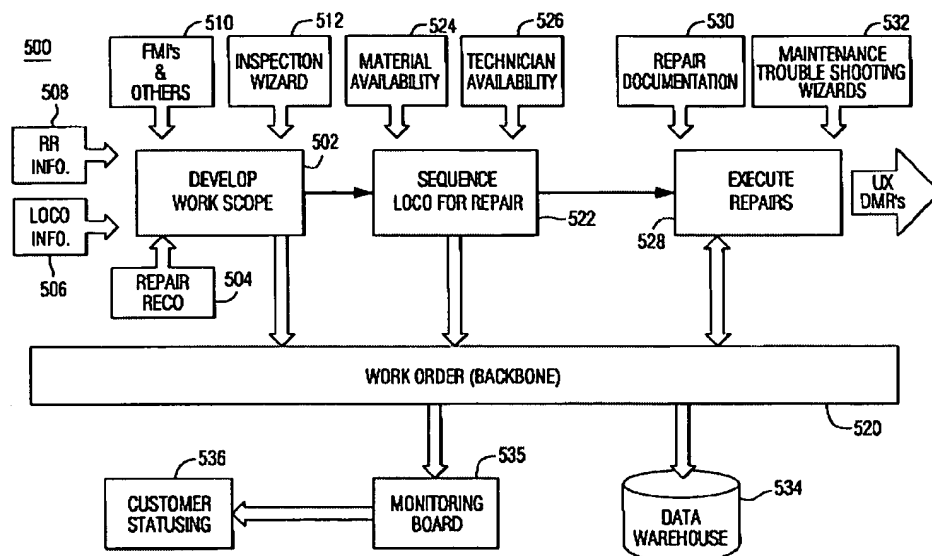


FIG. 10

Schlabach et al. does not expressly disclose that the service activity system and method is utilized in a semiconductor-manufacturing environment as claimed. However, Schlabach et al. teaches a system that can be applied to a variety of industries that utilize complex industrial equipment, such as semiconductor manufacturing, regardless of the intended field of use of the equipment (service components). That the system is utilized in the semiconductor manufacturing environment is obvious in light of the prior art and to one of ordinary skill in the art since the intended field of use does not change the overall functionality of the system. The intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

It would have been obvious to one skilled in the art at the time of the invention to utilize the system of Schlabach et al. to manage service activities in a plurality of



environments, including but not limited to semiconductor manufacturing, the service activity management system providing for the improved availability of the service components (Schlabach et al.: Column 14, Lines 1-10) regardless of the service component's intended field of use.

Regarding Claim 2 Schlabach et al. teach a service activity management system and method wherein the system provides service action data utilizing the service activity data by performing at least *two* of the following further comprises: setting project action plans (work scope, work orders, recommendations, etc.; Column 5, Lines 30-55; Figure 10), customer action plans (work scope, work orders, etc.; Column 20, Lines 11-44; Figure 10), service component operations, test and corrective actions (Column 15, Lines 47-68), setting escalation hot-boards (monitoring board; Column 20, Lines 47-57), key point indicator dashboards, preparing reports (status information, process improvement; Column 11, Lines 18-24; Column 6, Lines 5-10; Figure 7), setting procedures (policies), setting job descriptions (work scope, work orders, etc.; Column 20, Lines 11-44; Figure 10), setting help desk action plans, employee action plans (service recommendation; Figures 5-6), defining service agreements and service components.

Regarding Claim 3 Schlabach et al. teach a service activity management system wherein the service component (item, system, part, equipment, etc.) includes at least

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one of the following: a manufacturing system platform, tool or part (Column 3, Lines 1-43).

Regarding Claim 4 Schlach et al. does not expressly teach how the service components (tools, equipment, systems) are arranged (laid out, connected, etc.). However, Schlach et al. teach a system and method that is intended to manage a plurality of complex industrial equipment as discussed above.

Further the phrases "cluster" and "serial" tool arrangements represent non-functional descriptive material, merely labels, since it is obvious in light of the prior art and to one skilled in the art that arrangement of the tools (service components, equipment, etc.) does not change the overall functionality of the service activity management system. Further the tool arrangements do not patentably distinguish the claimed system.

It would have been obvious to one skilled in the art at the time of the invention that the service activity management system and method, with its ability to enable businesses to efficiently manage their service components (tools, platforms, complex industrial equipment) as taught by Schlach et al. would have been utilized to manage the servicing of complex industrial equipment regardless of the way in which the tools were arranged (cluster or serial); the resultant system providing for the improved availability of the serviced/managed components (Schlach et al.: Column 14, Lines 2-6).

Regarding Claim 5 Schlabach et al. does not teach that the service activity management system and method is utilized to manage/service service components (tools, platforms, etc.) in a semiconductor-manufacturing environment as claimed.

Official notice is taken that it is old and very well known that semiconductor manufacturing facilities/environments comprise at least one of the following manufacturing systems (tools, components, equipment, etc.): etch, deposition, track, thermal, ion implant, lithography, planarization, metrology or test.

Further the each of the specific service components listed (tools, manufacturing systems, etc.) represent non-functional descriptive material, merely labels, since it is obvious in light of the prior art and to one skilled in the art that type of equipment serviced/maintained does not change the overall functionality of the service activity management system as taught by Schlabach et al. nor do the specific tools listed patentably distinguish the claimed system. The specific tools merely represent an intended field of use for the service activity management system and as such the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

It would have been obvious to one skilled in the art at the time of the invention that the service activity management system and method, with its ability to enable businesses to efficiently manage their service components (tools, platforms, complex industrial equipment) as taught by Schlabach et al. would have been utilized to manage the servicing of complex industrial equipment, including but not limited to managing the service activity related to a plurality of semiconductor manufacturing systems; the resultant system providing for the improved availability of the serviced/managed components (Schlabach et al.: Column 14, Lines 2-6).

Regarding Claim 6 Schlabach et al. teach a service activity management system and method wherein the manufacturing part comprises at least one of the following types of parts: consumable or non-consumable (repair, replacement, etc.; Column 10, Lines 39-68; Column 11, Lines 1-11).

Regarding Claim 7 Schlabach et al. teach a service activity management system and method wherein the service account includes at least one of the following (Column 4, Lines 65-66; Figure 2, Element 62): service contract (agreement), warranty or manufacturing system department.

Regarding Claim 8 Schlabach et al. teach a service activity management system and method wherein the system is either a web-based (Column 5, Lines 2-12) or downloadable client software application.

Regarding Claim 9, the system for managing service activities as claimed is merely configured to provide an interface however the system does not actually provide the operator interface. For the purposes of examination examiner assumes the applicant will amend the claim to recite that system for managing service activities actually provides an operator interface.

Further regarding Claims 9-10 Schlabach et al. teach a service activity management system and method further comprises an operator graphical user interface, coupled to the other components/subsystems (Column 5, Lines 5-12; Column 12, Lines 35-50; Figure 4).

Regarding Claim 11, the system for managing service activities as claimed is merely configured to perform service component repair however the system does not actually perform the service component repair. For the purposes of examination examiner assumes the applicant will amend the claim to recite that system for managing service activities actually performs the service component repair.

Further regarding Claim 11 Schlabach et al. teach a service activity management system and method wherein the system performs service component repair via an interactive case study (case-based reasoning, tutorials, wizards, education, instructions,

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interactive guide, interactive assistance, etc.; Column 7, Lines 53-68; Column 8, Lines 1-13 and 44-63; Column 10, Lines 24-38).

Regarding Claim 12 Schlabach et al. teach a service activity management system and method wherein the system provides at least one test and corrective action for the service component by matching (comparing, reviewing, analyzing, etc.) current service activity data for the service component with service activity data stored in the system (Column 7, Lines 53-68; Column 8, Lines 1-13 and 44-63; Column 10, Lines 24-38; Column 13, Lines 11-65).

Regarding Claims 13-14, the system for managing service activities as claimed is merely configured to provide a procedure for tests and/or corrective actions however the system does not actually provide the procedures. For the purposes of examination examiner assumes the applicant will amend the claims to recite that system for managing service activities actually provides the procedures for the service component tests and corrective actions.

Further regarding Claims 13-14 Schlabach et al. teach a service activity management system and method wherein the system provides a procedure (steps, process, method, guide, tasks, etc.) for the test and the corrective action (Column 7, Lines 53-68; Column 8, Lines 1-13 and 44-63; Column 10, Lines 24-38; Column 13, Lines 11-65; Column 14, Lines 40-68).

Regarding Claim 15 Schlabach et al. teach a service activity management system and method wherein a service component includes a manufacturing system (i.e. industrial process) tool (equipment, item, device, etc.) and the corrective action includes replacing a part in the manufacturing system tool (Column 2, Lines 40-57; Column 6, Lines 35-60; Column 20, Lines 1-10).

Regarding Claim 16, the system for managing service activities as claimed is merely configured to track a first and second manufacturing system part however the system does not actually track the manufacturing system parts. For the purposes of examination examiner assumes the applicant will amend the claim to recite that system for managing service activities actually tracks the first and second manufacturing parts.

Further regarding Claim 16 Schlabach et al. teach an service activity management system wherein the system tracks parts usage and replacement/repair part ordering/requisitioning, i.e. first/ second manufacturing parts wherein the first part replaced the second part (parts usage tracking; Column 9, Lines 2-8; Column 11, Lines 6-11; Figure 2, Element 60).

Regarding Claim 17 Schlabach et al. teach a service activity system and method wherein the system utilizes a result from the test to provide another test and corrective action for the service component by matching the result with the service activity data

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stored in the system (e.g. case-based reasoning, wizard, etc.; Column 7, Lines 53-68; Column 8, Lines 1-13 and 44-63; Column 10, Lines 24-38).

Regarding Claim 18, the system for managing service activities as claimed is merely configured associate one or more parts with a manufacturing tool part however the system does not actually associate one or more parts with a manufacturing tool. For the purposes of examination examiner assumes the applicant will amend the claim to recite that system for managing service activities actually associate one or more parts with a manufacturing tool.

Further regarding Claim 18 Schlabach et al. teach a service activity management system and method wherein the service component comprises associating one or more parts with a complex piece of equipment (service component, manufacturing tool, etc.; Column 3, Lines 5-43; Column 9, Lines 36-60).

Regarding Claim 19, the system for managing service activities as claimed is merely configured permit the assignment of a plan to a operator however the system does not actually assign a plan to an operator. For the purposes of examination examiner assumes the applicant will amend the claim to recite that system for managing service activities actually assigns a plan to an operator.



Further regarding Claim 19 Schlabach et al. does not teach enabling a service operator/technician to assign another operator (user) to an action plan (work order, service items, etc.) as claimed.

Official notice is taken that assigning (re-assigning, forwarding, passing, etc.) of work activities (service activities, work orders, tasks, etc.) by one user to another user is old and very well known. For example a service technician maybe assigned an order but realizes that another technician would be more capable (more relevant skills/tools, availability, proximity, etc.) of handling the service request (action, task, order, etc.) therefore the operator forwards (re-assigns, transfers, etc.). Another example would be forwarding a partially complete service activity (work order) from one operator to another due to a shift change, additional/newly discovered work/requirements or the like.

It would have been obvious to one skilled in the art at the time of the invention that the service activity management system and method with its ability to schedule the necessary resources (personnel, parts, etc.) to effect a service activity would have benefited from the ability to have a service operator assign a service activity (task, action plan, work order, etc.) to another user in the system (employee, customer, project, etc.) in view of the teachings of official notice; the resultant system enabling users the flexibility to forward/re-assign service activities (work orders, tasks, plans, etc.) to other more applicable resources (operators, groups, etc.).

Regarding Claim 20, the system for managing service activities as claimed is merely configured enable one operator to assess the performance of another operator however the system does not actually perform the assessment. For the purposes of examination examiner assumes the applicant will amend the claim to recite that system for managing service activities actually performs the assessment.

Further regarding Claim 20 Schlabach et al. does not teach enabling an operator (user) to assess the performance (activity, work, etc.) of another operator as claimed.

Official notice is taken that enabling a user to asses the performance of another user (operator, etc.) is old and well known. For example it is common in maintenance operations, especially outsourced/contracted maintenance operations, for an operator to be required to get approval (e.g. signature) certifying the service repair (work order) was completed and satisfactory. The certification of work completed by a service operator in training or a junior operator by a supervising service operator is another example of enabling one user to asses the performance of another user.

It would have been obvious to one skilled in the art at the time of the invention that the service activity management system and method would have benefited from the ability to have a service operator asses the performance of a service activity (task, action plan, work order, etc.) by another user in the system (employee, customer,

project, etc.) in view of the teachings of official notice; the resultant system enabling customers (clients) to approve that the service activity/action was completed to their satisfaction/requirements.

Regarding Claim 22 the system for managing service activities as claimed is merely configured to collect and store service activity data as well as perform a service component and non-service component function (activity) however the system does not actually collect and store service activity data or perform a service/non-service component function/activity. For the purposes of examination examiner assumes the applicant will amend the claim to recite that system for managing service activities actually collects and stores the service activity data as well as performs the service/non-service component functions.

Regarding Claims 22, 30 and 37-38 Schlabach et al. a service activity management system and method comprising:

- receiving/collections service activity data related to at least one of a service component (item, equipment, part, etc.; Column 2, Lines 59-68; Column 3, Lines 1-17; Figure 2) a service operator (technician, personnel, staff, etc.; Column 5, Lines 30-35; Figures 1, 5-6), or a service account (relationship, contract, agreement, warranty, etc.; Column 4, Lines 61-68; Column 11, Lines 12-17; Figure 2, Element 62), via a data collection system (module, code, subsystem, program, etc.);

- storing the service activity data, via a data storage system (Figure 2; Figure 10, Element 534);
- providing service action data utilizing the service activity data by performing at least two of the following (Figures 2 and 10): component repair (Column 5, Lines 30-57), start-up (initialization, set-up, installation), preventative maintenance (Column 6, Lines 35-60), cleaning, revisions, enhancements (upgrades, configuration management; Column 7, Lines 53-68; Column 9, Lines 36-68), de-installation (uninstall, decommission, etc.), education (training; Column 7, Lines 43-64) or collaboration (Column 5, Lines 45-63); and
- utilizing the service action data to perform a service action (Column 13, Lines 11-65; Figures 5-6).
- performing a service component and non-service component function in order to assist a service operator in performance a service action (e.g. create new/update service recommendations via the service recommendation subsystem; Column 14, Lines 40-68).

Schlabach et al. does not expressly disclose that the service activity system and method is utilized in a semiconductor-manufacturing environment. However, Schlabach et al. teaches a system that can be applied to a variety of industries that utilize/comprise complex industrial equipment, such as semiconductor manufacturing. That the system is utilized in the semiconductor manufacturing environment is obvious in light of the prior art and to one of ordinary skill in the art since the intended field of use does not change

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the overall functionality of the system. The intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

It would have been obvious to one skilled in the art at the time of the invention to utilize the system of Schlabach et al. to manage service activities in a plurality of environments, including but not limited to semiconductor manufacturing, the service activity management system providing for the improved availability of the service components (Schlabach et al.: Column 14, Lines 1-10) regardless of the intended field of use.

Regarding Claims 23-24 and 31-32 the system for managing service activities as claimed is merely configured to receive manual and/or automatic input however the system does not actually receive manual and/or automatic input. For the purposes of examination examiner assumes the applicant will amend the claims to recite that system for managing service activities actually receives manual and/or automatic input.

Further regarding Claims 23-24 and 31-32 Schlabach et al. teach a service activity management system and method wherein the system collects service activity data manually (as discussed above) or automatically (on-board monitoring, service technician input; Column 11, Lines 37-55).

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Regarding Claims 25-26 and 33-34 Schlabach et al. teach a service activity management system and method wherein the system collects and stores service activity data related to at least one of the following: service component (item, equipment, part, etc.; Column 2, Lines 59-68; Column 3, Lines 1-17; Figure 2) a service operator (technician, personnel, staff, etc.; Column 5, Lines 30-35; Figures 1, 5-6), or a service account (relationship, contract, agreement, warranty, etc.; Column 4, Lines 61-68; Column 11, Lines 12-17; Figure 2, Element 62).

Regarding Claims 27 and 35 the system for managing service activities as claimed is merely configured to perform at least two service component functions however the system does not actually perform the service component functions. For the purposes of examination examiner assumes the applicant will amend the claims to recite that system for managing service activities actually performs at least two of the service component functions.

Further regarding Claims 27 and 35 Schlabach et al. teach a service activity management method and system wherein performing the service component function comprises performing at least one of the following (Figures 2 and 10): component repair (Column 5, Lines 30-57), start-up (initialization, set-up, installation), preventative maintenance (Column 6, Lines 35-60), cleaning, revisions, enhancements (upgrades, configuration management; Column 7, Lines 53-68; Column 9, Lines 36-68), de-

installation (uninstall, decommission, etc.) or education (training; Column 7, Lines 43-64).

Regarding Claims 28 and 36 the system for managing service activities as claimed is merely configured perform a non-service component service function however the system does not actually perform a non-service component service function. For the purposes of examination examiner assumes the applicant will amend the claims to recite that system for managing service activities actually performs a non-service component service function.

Further regarding Claims 28 and 36 Schlabach et al. teach a service management system and method wherein the system enables a service operator to perform non-service component functions/activities by allowing the service operator (user, technician, personnel) to:

- interface (view, interact, review, etc..) with project or customer action plans (work orders, work scope, etc.; Column 20, Lines 11-50; Figure 10);
- integrate (add ) a new test or corrective action or amend (edit) a current test or corrective action (recommendation authoring subsystem; Column 14, Lines 40-68; Column 15, Lines 1-3 and 47-68; Figure 7);
- enter (provide, input, etc.) new manufacturing system platform, tool part or service agreement documentation (expert repository, recommendation authoring

subsystem, warranty information module, operational parameter database, etc.; Column 8, 14-21; Figure 2);

- review, enter or amend escalation hot-boards (Column 20, Lines 47-63; Figure 10, Element 535);

- access key performance indicators (KPI) dashboards (screens, reports, statistics, etc.), reports (status information, process improvement; Column 11, Lines 18-24; Column 6, Lines 5-10; Figure 7), procedures (service recommendations, inspection procedures, etc.; Column 8, Lines 44-63), job descriptions (work order, repair history; Figure 10), help desk, employee action plans (work order, repair history; Column 8, Lines 44-63; Column 9, Lines 13-22; Figure 10), or files;

- collaborate with other service operators (e.g. instant messaging; Column 5, Lines 45-63); or

- access information relating to manufacturing system service agreements (Figure 2, Element 62), platforms, tools and parts.

Regarding Claim 29 the system for managing service activities as claimed is merely configured to provide service action data however the system does not actually provide the service action data. For the purposes of examination examiner assumes the applicant will amend the claim to recite that system for managing service activities actually provides the service action data.



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Further regarding Claim 29 Schlabach et al. teach a service activity management system and method wherein the system and method further provide service action data to a service operator to perform service actions (Column 7, Lines 53-68; Column 8, Lines 1-13 and 44-63; Column 10, Lines 24-38).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Davis et al., U.S. Patent No. 4,612,620, teach a service activity (e.g. preventative maintenance) management system and method comprising a service component (equipment) and a service operator (maintenance operator) wherein the system collects, analyzes and reports on a plurality of service activity data including such activities as service component tests.

- Gordon et al., U.S. Patent No. 5,195,173, teach a maintenance (service activity) advisor (expert system) system and method wherein the system provides detailed service activity (e.g. repair and replacement information, troubleshooting, equipment tests, etc.) information (e.g. lessons, guidance, advice, etc.) to a service operator (service technician) via a graphical user interface.

- Cornett et al., U.S. Patent No. 5,216,612, teach a service activity management system and method for a manufacturing system. Cornett et al. further teach that the scheduling of maintenance activities, including the replacement of consumable parts, is old and well known. Cornett et al. teach that the service activity management system and method comprises a detailed equipment catalog (bill or materials), parts/equipment manuals (documentation, schematics, engineering drawings, etc.) as well as a the ability to perform service activities related to at least upgrades, part/equipment replacement, de-installation (end of machine life) and the like via a work/action plan.

- Nguyen et al., U.S. Patent No. 6,003,808, teach a online warranty management system and method wherein the system tracks all parts (original, replacement, etc.) as part of a service activity management system. Nguyen et al. further teach that the warranty management system provides multi-media repair guides (manuals, documentation, etc.) via a graphical user interface.

- Vines et al., U.S. Patent No. 6,006,171, teach the old and well-known utilization of computerized maintenance management systems (CMMS) in manufacturing environments/systems. Vines et al. further teach linking conventional CMMS and process management/control systems to provide a service activity management system via a graphical user interface.

- Aragonés et al., U.S. Patent No. 6,067,486, teach an Internet-based service activity management system and method wherein the system enables a service operator (service manager) to perform a plurality of service operations (functions, activities) including but not limited to repairs, upgrades, inspections, restorations and the like. Aragonés et al. further teaches that the service activity management system comprises detailed parts (original, replacement) tracking as well as detailed repair plans.

- Wetzter, Michael, U.S. Patent No. 6,738,748, teaches a system and method for performing predictive maintenance via a plurality of service operators on a plurality of service components (devices, equipment, etc.). Wetzter further teaches that service operators perform service activities such as repair, replacement, configuration (upgrade, revision) and the like.

- Spira et al., U.S. Patent Publication No. 2002/0035495, teach an Internet-based system and method for providing maintenance services in a manufacturing environment wherein the maintenance services (activities) system and method further comprises performance based contracts that utilized key performance indicators, maintenance policies, preventive maintenance schedules and the like. Spira et al. teaches that the maintenance services system and method includes a plurality of maintenance activity types including but not limited to condition based maintenance, preventative maintenance, corrective maintenance, planned shut-downs and the like.

- Squeglia et al., U.S. Patent Publication No. 2002/0156692, teach an Internet-based service activity management system and method comprising service recommendations, technical documentation (manuals, schematics, configuration, parts, etc., service actions/activities (diagnostics, troubleshooting, repairs, replacement, upgrades, inspections, etc.), service recommendations, service operators (technicians), service components, contracts, warranties, parts tracking (parts usage tracking) and the like for industrial equipment.

- Roddy et al., U.S. Patent No. 2003/0055666, teach an Internet-based service activity management system and method wherein the system manages a plurality of service components (equipment, trains, etc.) utilizing real-time operating data, historical performance data (failure probability, parts inventories, etc.) and the like. Roddy et al. teach that the service activity management system provides service recommendations that instruct the service technician how (manuals, technical documentation, training, etc.) and when to perform service activities via an action plan (work scope).

- Fujitsu AMD Semiconductor, WO 02/089189, teaches a system and method for managing service activities (e.g. maintenance) in a semiconductor manufacturing facility wherein the system diagnoses service components (e.g. device, equipment, etc.) and provides corrective actions based on service action/activity data stored in a database via a graphical user interface.

- Karceski, Jeffrey D. et al., WO 2005/0544968, teach a system and method for predictive/preventative maintenance (service activity/action) in a semiconductor manufacturing facility.

- Major Fab Signs Service Agreement with Axcelis Valued at Greater than \$30M, teaches the well-known utilization of service management activities via service agreements/contracts in the semiconductor manufacturing industry.

- ServicePlus Product Internet Pages (October 2000 and December 2003) teaches the commercial availability of an Internet based service activity management system and method wherein the system comprises service technicians, customers, warranties, contracts and multi-level equipment maintenance, repairs and upgrades.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (571) 272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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